

REMARKS

This responds to the Office Action dated on October 31, 2007.

Claims 1, 3-4, 7, 11, 13-14, and 17 are amended. Claims 2 and 12 are canceled. Claims 1, 3-11, and 13-20 are now pending in this application.

§102 Rejection of the Claims

Claims 1, 2, 4, 5, 7, 8, 10-12, 14, 15, 17, 18 and 20 were rejected under 35 U.S.C. § 102(e) as being anticipated by Casavant (U.S. 2004/0088015). Claims 1-3, 5, 7, 8, 10-13, 15, 17, 18 and 20 were rejected under 35 U.S.C. § 102(e) as being anticipated by Shafer (U.S. 2004/0172075). The rejections are traversed and reconsideration is respectfully requested.

Regarding the rejections based upon the Casavant reference, Applicant disputes that the limitations of any of the pending claims are taught by the reference as alleged in the Office Action. Among other things, the Casavant reference appears to only describe a device for delivering phrenic nerve stimulation, not parasympathetic stimulation as recited by the pending claims. (The phrenic nerve arises from the third, fourth, and fifth cervical spinal nerves and is not a parasympathetic nerve.)

Regarding the rejections based upon the Shafer reference, Applicant believes that the reference is not prior art under section 102(e) by reason of its later filing date than the present application. The Office Action states that the Shafer reference “nonetheless receives the priority to each of its parents for those limitations concerned with the instantly claimed invention” and is therefore prior art under section 102(e). This, of course, is not exactly correct. For purposes of either section 102(e) prior art or for purposes of a priority claim, a patent that is a continuation or continuation-in-part receives the effective filing date of its parent only for subject matter disclosed in the parent that is carried forward into the continuation or continuation-in-part application that results in the issued patent. Applicant is unable to find the teachings alleged in the Office Action to anticipate the pending claims in any of the parents of the Shafer reference that are themselves issued patents. If the Examiner feels that one or more of those parents that are issued patents contain teachings relevant to the patentability of the present application, it is those parents that should be cited, not the Shafer reference.

§103 Rejection of the Claims

Claims 1-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams (U.S. 2003/0229380) in view of Gross (U.S. 2003/0045909). The rejections are traversed and reconsideration is respectfully requested.

Applicant has amended claims 1 and 11 to incorporate the limitations formerly recited by claims 2 and 12, respectively. In rejecting claims 2 and 12, the Office Action states that Adams “discloses a sensor for measuring cardiac output (see for example paragraphs 10 and 92), wherein the controller is programmed to modulate the delivery of parasympathetic stimulation in accordance with the measured output (see for example paragraphs 11, 42 and 46).” Applicant has examined the cited paragraphs of Adams and finds only teachings relating to the measurement of blood pressure or heart rate, not cardiac output as recited in the claims.

Although both blood pressure and heart rate are related to cardiac output, they are most definitely not equivalent to cardiac output. Cardiac output can decrease while either heart rate or blood pressure increases (and vice-versa) due to, for example, changes in myocardial contractility or changes in vascular resistance. Applicant further finds nothing in the Adams reference relating to the use of measured cardiac output and exertion level in order to compute a parameter indicative of the adequacy of the cardiac output and to modulating the delivery of parasympathetic stimulation in accordance therewith. Applicant respectfully asserts that the limitations recited by claims 1, 3-11, and 13-20 as amended herein are not rendered obvious by the Adams and Gross references.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (847) 432-7302 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 31st day of January 2008.

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